

REMARKS

Reconsideration is respectfully requested.

In the Office Action, (1) the abstract was objected to as being in excess of 150 words, (2) claims 1-30 were rejected under 35 U.S.C. 112, second paragraph, due to questions regarding the phrase "remove spacer layer material from said trench bottom," (3) claims 1-2, 10-12, 20-22 and 30 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,540,928 of Kobrin et al., and (4) claims 3-7, 13-17 and 23-27 were rejected under 35 U.S.C. as being unpatentable over Kobrin et al. in view of U.S. Patent No. 4,871,630 of Giammarco et al.

Regarding the specification objection, the Abstract has been reduced down to 139 words in compliance with the 150 word limitation.

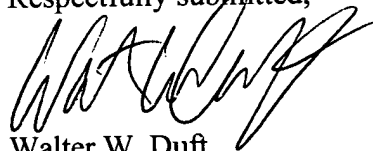
Regarding the rejection under section 112, second paragraph, the office queries how it is possible to remove spacer layer material from said trench bottom (as recited in claims 1, 11 and 21) when the paragraph preceding states that the spacer layer material is deposited "only" on the trench sidewalls. In point of fact, the paragraph dealing with spacer layer deposition does not say that this material is deposited "only" on the trench sidewalls. The paragraph does not rule out the trench bottom being covered. In fact, because the spacer layer material is deposited using a "chemical vapor deposition process," it would be expected that the trench bottom would receive some of the material even though such deposition coverage may not be intended. Persons skilled in the art would appreciate that the recited paragraph dealing with removing spacer layer material from the trench bottom essentially refers to a "clean-up" step that clears out the trench bottom to expose the electroplating seed layer for the subsequent deposition of electroplating material. As such, it is believed that the claims definite, and that the subject matter regarded as the invention is particularly pointed out and distinctly claimed.

Regarding the anticipation rejection under section 102(e), it is noted that the Kobrin reference lacks the limitation recited in rejected independent claims 1, 11 and 21 that calls for “depositing an insulative spacer layer using a low temperature chemical vapor deposition process to cover said trench side walls.” In Kobrin, the trench narrowing features shown by reference numbers 62/64 and 72/74 are generated by what is referred to at column 4, lines 22-36 as a “silylation” process in which the resist layer formed with a trench is expanded by “replacement of an active hydrogen of a protic material with a substituted silicon atom.” As the resist layer expands, the trench narrows. This is not the process recited in claims 1, 11 and 21. Thus, it is respectfully submitted that an anticipation rejection cannot be supported by Kobrin.

Regarding the obviousness rejection under section 103(a), the withdrawal of the anticipation rejection would appear to negate this rejection. Insofar as Kobrin does not disclose or suggest the use of spacer layer materials to cover the side walls of a trench, Giammarco becomes irrelevant.

In view of the foregoing, Applicant respectfully requests that all objections and rejections be withdrawn and that Notices of Allowability and Allowance be duly issued.

Respectfully submitted,



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